

WHY SHOULD WE EDUCATE FOR INQUISITIVENESS

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Inquisitiveness is a paradigm example of an intellectual virtue. Despite some extensive work on the characterisation of the intellectual virtues however, (e.g. Roberts and Wood, 2007; Baehr 2011) no detailed treatment of the virtue of inquisitiveness has been forthcoming in the recent literature.¹ This paper offers a characterisation of the virtue of inquisitiveness considered within the framework of educating for intellectual virtue. As such, it presents the case in support of educating for inquisitiveness. The characterisation offered seeks to highlight in particular the distinctive relationship that inquisitiveness bears to the activity of *questioning*. On the basis of this relationship and in conjunction with an examination of the role that questioning plays in the learning process, it is argued that inquisitiveness is a primary intellectual virtue to educate for. In Part I the characterisation of

¹ Several commentators, notably Jonathan Kvanvig (2003, 2012) and Dennis Whitcomb (2010), have examined the nature of *curiosity* in some depth. In addition, Roberts and Wood (2007) offer a detailed characterisation of the intellectual virtue they call 'love of knowledge' (Chapter 6) construed along similar lines. As we will see, however, both curiosity and the love of knowledge should be regarded as distinct from the intellectual virtue of inquisitiveness that is our focus. A more explicit discussion of inquisitiveness can be found in Nenad Miscevic's (2007) paper arguing for the central role of *inquisitiveness or curiosity* in the virtue-theoretic framework. However, he does not offer an explicit characterization of this trait (or traits) as an intellectual virtue.

inquisitiveness is developed and its distinctive relationship to questioning is examined. In Part II the argument in support of educating for inquisitiveness is presented.

PART I: WHAT IS INQUISITIVENESS

1. Characterising the Intellectual Virtues

The intellectual virtue of inquisitiveness shares a number of features in common with all of the intellectual virtues. In order to characterise inquisitiveness then, it will be constructive to begin by examining these features. Firstly, we will establish the basic *structure* of the intellectual virtues and subsequently offer an account of their *common goal*. This will lay the foundations for the characterisation of inquisitiveness.

1.1 Structure of the Intellectual Virtues

In her influential work, *Virtues of the Mind* (1996), Linda Zagzebski offers a prominent account of the structure of the virtues. Central to this account is Zagzebski's claim that the virtues are comprised of both a motivational and a success component. The motivational component, according to Zagzebski, guides our actions and provides us with "a set of orientations toward the world" (p.136). As such, this component requires that an agent possess virtuous motivations in order to be attributed a virtue. Zagzebski defines motivation "in terms of the end at which it aims and the emotion that underlies it" (p.136). This demonstrates a close link between the motivational component and the success component. Zagzebski asserts that, "[A] person does not have a virtue unless she is reliable at *bringing about the end* that is the aim of the motivational component of the virtue" (p.136, emphasis added). This requirement of reliable success in her account places a significant demand on the virtuous agent. As such, over and above having virtuous motivations, the agent must also act virtuously. Zagzebski's account is intended to capture the structural components of both the intellectual and moral virtues and will provide the structural basis for our characterisation of inquisitiveness.

1.2 Goal of the Intellectual Virtues

Demarcating the intellectual virtues in terms of their distinctive goal is an approach that has been suggested and adopted particularly within the context of distinguishing the intellectual and moral virtues (see for example, Baehr, 2011, Appendix). An account of the distinctive goal of the intellectual

virtues can be developed by drawing on and expanding Zagzebski's structural framework. As we have seen, Zagzebski posits both a motivational and a success component. These two components themselves, however, can also be divided into component parts thereby establishing a further distinction.² The elements of this further distinction are labelled, by Baehr (2013), the ultimate and immediate aims of the virtues. Accordingly, the ultimate aim of the virtues is that element of the motivational component that is *common* to all the virtues. In the present context this will be referred to as the *common goal*. The immediate aim of a virtue is that element of the motivational component that is *distinctive* to that virtue. This will be referred to as the *distinctive goal*. As such, a distinction is drawn between the common goal of the intellectual virtues in general and the distinctive goals of the individual virtues. The former serves as an underlying motivation for all the intellectual virtues while the latter serve as characteristic motivations for particular virtues allowing us to distinguish these from each other. In addition, the success component of the virtues can also be construed in terms of this distinction thus dividing it into success in achieving the common goal of the virtues in general and success in achieving the distinctive goals of the individual virtues. This distinction will allow us to identify the *common goal* of the intellectual virtues.

Commonly, the intellectual virtues are distinguished from their moral counterparts in terms of the notion that they arise out of a concern with intellectual or epistemic goods such as knowledge, truth and understanding. Zagzebski (1996), for example, highlights this distinctive feature of the intellectual virtues commenting that they “are all forms of the motivation to have *cognitive* contact with reality” (p.167, emphasis added). As such, the intellectual virtues are demarcated by a somewhat broad concern with ‘cognitive or epistemic matters’. In line with this broad and intuitive approach to conceiving of the epistemic, we will characterise the common goal of the intellectual virtues as the goal of *improving epistemic standing*. An individual's epistemic standing is broadly taken to encompass all of her true beliefs, knowledge and understanding. The notion however, should be treated as flexible enough to allow for any preferred set of cognitive or epistemic goods and may also include a person's attitudes towards these goods or their ability to acquire them. Roberts and Wood (2007, p.117), for example, discuss the ‘powers and skills’ by which a person acquires epistemic goods, in addition to the goods

² This distinction has recently been observed by Jason Baehr (2013, p.100) among others. Thanks to Jason for this suggestion and for a useful discussion of the distinction.

themselves and these might be incorporated into a person's epistemic standing.³ At any rate, by aiming at an improvement in epistemic standing, the intellectual virtues can be understood as aiming at cognitive contact with reality. Furthermore, by including the notion of *improvement*, the virtues are also intrinsically tied to succeeding in this aim and are thus sensitive to Zagzebski's success component. We will come to see how this success component is manifested in more detail in due course. Finally, it should be noted that an improvement in epistemic standing may equally occur in one's own standing or that of another. This point will also become more salient later in the discussion. For now, we can note that a concern with improving epistemic standing gives rise to the intellectual virtues and can as such be thought of as a pre-requisite for intellectual virtue. Interestingly, this goal bears some resemblance to the virtue characterised by Roberts and Wood (2007) as 'love of knowledge'. Significantly, however, Roberts and Wood treat this as an intellectual virtue in its own right whereas here it is understood as a pre-requisite for *all* the intellectual virtues. This contrast further illuminates the goal of improving epistemic standing.

We have thus established a structural basis for characterising the virtues and identified the common goal of the intellectual virtues as the goal of improving epistemic standing. Having done so, we can now examine the features that are distinctive of the virtue of inquisitiveness. As such, we will identify the *distinctive goal* of inquisitiveness and in doing so draw attention to the special relationship between inquisitiveness and questioning.

2. Characterising Inquisitiveness

Beginning with an intuitively plausible account of inquisitiveness, we may characterise it as a *tendency to question*. This identifies *questioning* as the distinctive and defining feature of inquisitiveness. In support of this, imagine a pupil in a school science class who, despite being attentive during lessons, declines to ask any questions about the scientific subject matter being discussed. This is so even when prompted by her teacher and given access to a wide range of relevant scientific resources outside of the classroom. In this case, it seems clear that we would not describe such a pupil as inquisitive. Moreover, it is the fact that she declines to ask questions in the absence of any barriers to doing so that exposes her lack of inquisitiveness. This is the case even with a broad characterisation of

³ Thanks also to Jason Baehr for this suggestion.

questioning in play which incorporates both articulated and non-articulated questions such as privately looking up a relevant scientific fact outside of the classroom. The inquisitive person asks questions; without doing so she cannot be attributed the virtue of inquisitiveness.

2.1 Motivational Component

With an intuitive account of inquisitiveness thus established we can now examine its component parts. Turning first to the motivational component, in Zagzebski's (1996) account she defines motivation as "a persistent tendency to be moved by a motive of a certain kind" (p.132). The notion of a *tendency* is thus employed within the definition. On this basis we can restate our intuitive characterisation of inquisitiveness in order to identify its characteristic motivation. The notion of a *characteristic* motivation, in addition, is employed in line with Zagzebski's account ensuring that the motivation represents a stable feature of the inquisitive person's character. Thus, the inquisitive person is *characteristically motivated to ask questions*. Here as above, questioning is identified as the distinctive and defining feature of inquisitiveness.

In addition, we can further refine our characterisation of inquisitiveness by noting that the inquisitive person should be characteristically motivated, not merely to ask questions, but to ask questions aimed at the common goal of the intellectual virtues, that of improving epistemic standing. To see this, imagine a second pupil who can this time be relied upon to ask relevant questions during school science classes. However, in this case, unbeknownst to his teacher, our pupil has been bribed by his lazy classmates who have offered to pay him a dollar for every relevant question he asks. The pupil has no genuine interest in finding out the answers to his questions and is motivated purely by the thought of the dollars he is earning. In this case it again seems misplaced to attribute the virtue of inquisitiveness to the pupil. Although he exhibits a characteristic motivation to ask questions he is not motivated to do so in order to know or understand the answers given. It is his wayward motivation then makes us disinclined to attribute to him the virtue of inquisitiveness.

We can accommodate this aspect of inquisitiveness by drawing on the notion of *sincerity*. A sincere question is one in which the questioner genuinely wants to improve epistemic standing with respect to the subject matter in question. In other words, unlike in the case just described, a sincere question is one in which the questioner genuinely wants to know or understand the answer. This notion of

sincerity allows us to further refine the motivational component of inquisitiveness. Thus, an inquisitive person is *characteristically motivated to engage sincerely in questioning*.⁴

2.2 Success Component

This brings us to the second component of Zagzebski's (1996) structural account of the virtues, namely, the success component. This is understood in terms of reliable success in bringing about the ends of the motivational component. In the first instance, it should be noted that this demand for reliable success is arguably more contentious than the demand for virtuous motivations. In particular, in the case of inquisitiveness it may seem unnecessarily restrictive or simply implausible to require that the inquisitive agent is reliably successful at improving epistemic standing through their questioning. To see this, take the example of a third pupil in an alternative science class, one being taught by an epistemically unfriendly teacher. This teacher is committed to lying in response to any question she is asked. Thus, despite our third pupil's characteristic motivation to ask sincere questions in order to improve his epistemic standing on the topic under discussion he is bound not to achieve his goal given his epistemically unfriendly circumstances. In this case it seems that attributing the virtue of inquisitiveness to the pupil may still be appropriate despite the fact that he fails to improve his epistemic standing. This brings into question the demand for reliable success in the case of inquisitiveness.

We can, however, recognise the significance of the success component in our characterisation by changing the example to highlight the crucial role that it plays. Imagine then that the pupil is genuinely interested in the refraction of light and keen to learn more about it. As a result he regularly asks questions during classes in which the topic is covered. However, despite their sincerity, the questions are invariably confused and irrelevant. As with the previous case, the pupil is characteristically motivated to ask sincere questions and yet fails to improve his epistemic standing. However, unlike the first case, this pupil's failure is not a result of his epistemically unfriendly environment. Rather, it is due to a faulty question-asking strategy; he is asking the *wrong questions*. Our pupil's failure to improve his epistemic standing therefore does not result from a problem with his epistemic surroundings but from the pupil himself. It is on this basis that he fails to exhibit the virtue of inquisitiveness.

⁴ Thanks to Allan Hazlett for useful comments on the notion of sincerity.

On the basis of this second case we must incorporate a further refinement in our characterisation of inquisitiveness. In addition to the requirement of sincerity, the inquisitive person must also engage in *good questioning*. This can be construed as the success component of the virtue of inquisitiveness. In order to be virtuously inquisitive a person must not only exhibit a characteristic motivation to engage *sincerely* in questioning, they must also be a *good* questioner. As we have seen, whether or not they are successful at improving epistemic standing as a result of good questioning is determined by whether or not they are in an epistemically conducive environment. Actually improving epistemic standing is not a requirement of the intellectual virtue of inquisitiveness; *good questioning* that aims at doing so is.

This further requirement can be helpfully elucidated by recalling the distinction outlined in Section 1.2 regarding the goals of the intellectual virtues. In particular we can pay attention to this distinction in terms of the success component. As was observed, success in achieving the common goal is distinguished from success in achieving the distinctive goal for any given virtue. In the case of inquisitiveness, success in improving epistemic standing (the common goal) is thus importantly distinct from successfully engaging in good questioning (the distinctive goal). Looking at the cases once again, the pupil in the epistemically unfriendly teacher case is prevented from improving his epistemic standing and so prevented from achieving the common goal of the virtues. He is however a good questioner and so is rightly credited with achieving the distinctive goal characteristic of inquisitiveness. On this basis he is thereby attributed the virtue. By contrast, our pupil fascinated by the refraction of light, despite his genuine interest, achieves *neither* the common goal nor the distinctive goal of the virtue and so is not deemed to be virtuously inquisitive. Hence, actually improving epistemic standing, as the common goal of inquisitiveness, is *not* required for the virtue. Good questioning that aims at such an improvement, as the distinctive goal of inquisitiveness, is required.⁵

⁵ Inevitably, the notion of good questioning deserves significantly more attention than can be afforded in the present paper. This is a significant task and any attempt to undertake it in this context will undoubtedly fall short. In light of this it will be useful to rely in general on an intuitive understanding of this notion to ground the claim that a person must be a *good questioner* in order to exhibit the virtue of inquisitiveness. I offer some further discussion of this notion in an extended characterisation of inquisitiveness elsewhere (Watson, *forthcoming*). Significant elaboration will, however, be required in order to examine this notion in detail and interpret its role as a central feature of the virtue of inquisitiveness, particularly with regard to educating for the virtue.

We are now in a position to offer a complete characterisation of the intellectual virtue of inquisitiveness. The inquisitive person is *characteristically motivated to engage sincerely in good questioning*. Questioning is thus an integral feature of the virtue of inquisitiveness.

2.3 Inquisitiveness as the Question-Asking Virtue

Before turning in Part II to the argument in support of educating for inquisitiveness it will be useful to explore the relationship between inquisitiveness and questioning in greater depth. Many, if not all, of the intellectual virtues manifest themselves, at least at times, in questioning. It is thus important to further explicate the relationship between inquisitiveness and questioning in order to highlight its distinctive nature. Recall our first school science pupil; it was precisely her failure to ask questions that prevented the attribution of virtuous inquisitiveness. As such, the inquisitive person *must* ask questions. Inquisitiveness is thus *defined* by its relationship to questioning. This defining relationship to questioning is, at least arguably, unique to inquisitiveness among the virtues. It is plausibly not exhibited by any of the other intellectual virtues including, significantly, closely aligned virtues such as reflectiveness, contemplativeness, curiosity and wonder, all of which are listed alongside inquisitiveness in Baehr's (2011) taxonomy of the virtues (p.21) which we will return to in Part II. Crucially, one can reflect, contemplate and wonder without actually asking questions. One can also, at least arguably, be curious without asking questions. Inquisitiveness thus distinguishes itself from the other intellectual virtues on the basis of its defining relationship to questioning.

The claim that questioning is not required in the case of curiosity, however, may at first glance appear contentious. One may indeed regard inquisitiveness and curiosity as synonymous. Nenad Miscevic (2007), for example, employs the terms interchangeably. It is thus worth exploring the purported difference between these virtues a little further in order to elucidate the unique relationship that inquisitiveness bears to questioning. In particular, inquisitiveness and curiosity can be regarded as distinct precisely on the basis of their different relationships to questioning. Specifically, questioning is a practice characterised by the distinctive goal or function of eliciting information. As we have seen, inquisitiveness is characterised in part by the actual and sincere asking of questions on the part of the inquisitive agent. As such, inquisitiveness is characterised in part by a genuine attempt to elicit information. It thereby requires questioning and so exhibits a defining relationship to this activity. Curiosity, by contrast does not require the actual asking of questions; the curious person is not required

to make any attempt to elicit information in order to be attributed the virtue of curiosity. One may be curious about the implications of the discovery of the Higgs-Boson particle, for example, without making any attempt to elicit information that would answer to a particular question on the topic. One can be curious *without* asking (either articulated or non-articulated) questions. Curiosity therefore involves a certain form of thoughtful reflection perhaps but this falls short of the characteristic motivation to engage in questioning that is required of inquisitiveness. This does not, of course, preclude the fact that curiosity often does involve questioning but crucially this is not a *defining* feature of the virtue. As such, the virtue of inquisitiveness sets itself apart from curiosity and the other intellectual virtues by being the only intellectual virtue for which questioning constitutes a *defining* feature. Inquisitiveness is the ‘question-asking’ virtue.⁶

To further elucidate what it means for questioning to constitute a *defining* feature of inquisitiveness we may consider once again the distinction between the common and distinctive goals of the virtues. In section 2.2 good questioning was identified as the distinctive goal of inquisitiveness. Our pupil in the epistemically unfriendly teacher case was thereby attributed the virtue of inquisitiveness despite his failure to improve epistemic standing. Our pupil fascinated by the refraction of light, in contrast, was not attributed the virtue precisely because he failed to ask good questions. Compare this to another of the intellectual virtues, say open-mindedness. While open-mindedness is often manifested in good questioning, it does not serve as the distinctive goal of the virtue. Thus, as we saw with curiosity above, a person may be virtuously open-minded without engaging in good questioning.

The same can likewise be said for the other closely aligned virtues. Reflectiveness for example, may manifest itself in good questioning but good questioning is not the distinctive goal of reflectiveness. A person who does not engage in good questioning can therefore still be described as virtuously reflective. This is not the case for inquisitiveness precisely because good questioning is its distinctive goal. Crucially, an agent who fails to achieve the distinctive goal of a virtue cannot be attributed that

⁶ The meaning of the terms inquisitiveness and curiosity may naturally vary among readers. It should therefore be noted that the characterisation of inquisitiveness offered here is ultimately unaffected if one does regard curiosity and inquisitiveness as synonymous. Thanks, however, to an anonymous referee for encouraging further discussion of the claim that they should in fact be treated as distinct.

virtue. As such, good questioning is not simply a manifestation of the virtue of inquisitiveness but its *defining* feature. This is what it means for questioning to constitute a defining feature of inquisitiveness.

Thus we have seen that the inquisitive person is characteristically motivated to engage sincerely in good questioning and that the virtue of inquisitiveness is therefore defined by its distinctive relationship to questioning. In Part II we will see that it is this distinctive relationship that brings inquisitiveness to the fore when considered within the framework of educating for intellectual virtue. As such, the discussion will now turn to the case in support of educating for the intellectual virtue of inquisitiveness.

PART II: WHY SHOULD WE EDUCATE FOR INQUISITIVENESS

3. Inquisitiveness in the Learning Process

Inquisitiveness has been identified as the question-asking virtue. When considered within the context of educating for intellectual virtue, this has particular significance. The activity of questioning is a ubiquitous feature of everyday learning. Young children in particular are often observed to be avid question-askers and as such, questioning plays a significant role in their communication with others and their interaction with the world. This natural tendency to question is manifest in a wide variety of contexts including formal learning environments such as the school classroom. There is, therefore, a natural association between inquisitiveness and learning. It can be argued, moreover, that the natural inclination exhibited by young children towards questioning provides us with a valuable tool in the promotion of intellectual flourishing. The activity of questioning should thus be harnessed by educational practitioners and theorists as a platform from which to educate for intellectual virtue. In order to promote intellectual flourishing through the activity of questioning then, we should educate for the intellectual virtue of inquisitiveness.

Some initial intuitive support for the significance of educating for inquisitiveness can be induced by comparing this to the case of educating for a different intellectual virtue such as intellectual humility. In a superficial sense at least, intellectual humility can be viewed as a more sophisticated intellectual virtue than inquisitiveness given that it plausibly requires the existence of some kind of intellectual pursuit about which one can be intellectually humble. In the early stages of learning the opportunities

for intellectual humility are likely to be limited given this requirement. By contrast, opportunities for questioning and thus inquisitiveness abound as children are continually confronted by the challenge to improve their epistemic standing. The primary classroom in particular thus provides children with the plentiful opportunities they need in order to exhibit and fine-tune the intellectual virtue of inquisitiveness. Many others of the intellectual virtues, like that of intellectual humility, can more be appropriately and thus effectively fostered at a later stage in the development of an individual's intellectual character. However, the natural emergence of questioning in the classroom should draw our attention to the special features of inquisitiveness that make it a primary intellectual virtue to educate for.

3.1 The Role of Questioning in Learning: Some Empirical Support

In addition to there being a natural intuitive association between inquisitiveness and learning one may also observe the valuable role that questioning, and so inquisitiveness, plays in the learning process on empirical grounds. A number of empirical studies have examined the role of children's questioning in the learning process. One such study sought to demonstrate the effects of increased questioning in a problem solving task (Blank, S. and Covington, M., 1965). For this purpose, the authors developed an auto-instructional program designed to induce questioning and tested fifty-four children taking part in a summer school science class. The group was divided into three groups each of which was tested under an experimental condition determined by their level of training in the program. Group one received full training in the program and were therefore encouraged to engage in questioning throughout the subsequent science task presented. Group two received partial training in the program with no training in questioning and group three received no training in the program or in questioning. The study found that children in group one asked significantly more questions as a result of their training thus demonstrating the effectiveness of the auto-instructional program. More significantly for the present purposes, the children in group one were also found to achieve better scores in the science task assigned to all of the participants and were seen to engage more productively in group discussions throughout. These results give an initial indication of the value of questioning in the learning process.

A more recent set of studies examines the role of children's questioning in cognitive development more generally (Chouinard, M., Harris, P. and Maratsos, M., 2007). This research can be seen to support the results of the earlier Blank and Covington (1965) experiment. In one key experiment,

sixty-seven children aged between four and five were given the task of identifying an object hidden within a box. The group was divided in half and tested under two experimental conditions. Group one were tested under the ‘question condition’ and were thereby allowed to ask questions during the task. Group two were tested under the ‘guess condition’ and were thereby not allowed to ask questions during the task but were instructed rather to guess what the object hidden in the box may be.

The results of the experiment revealed that children in group one were significantly more successful at identifying the object hidden in the box. This demonstrates, perhaps unsurprisingly, that the opportunity to ask questions is significant in the process of gathering information. The analysis of these results by the authors, however, focuses on the appropriateness and effectiveness of the children’s questions under the question condition. Despite several ways in which the children’s questions might fail the authors maintain that they were more often than not highly appropriate and well-suited to the task at hand. On this basis they conclude that “asking questions is a powerful mechanism that children can use to gather information that allows them to move forward on their journey to an adult-like understanding of the world” (2007, p.97). This conclusion provides further support for the claim that questioning plays a valuable role in children’s learning.

Chouinard, Harris and Maratsos (2007) also examined the effects of ‘self-generated’ questions arguing that children benefit significantly from raising their own questions as opposed to receiving answers to questions they have not themselves formulated. The authors maintain that “active engagement by the learner is a critical factor” (2007, p.4) in both gathering and retaining information. This is based on the hypothesis that information received in response to a self-generated question is better remembered due to the fact that the child is more engaged in the problem having identified for themselves a gap in their already existing conceptual structure. A child generating their own questions is already motivated to find the answers. This allows them to more readily integrate new information into their existing conceptual structure and proceed with a newly enriched structure. Once again, these conclusions support the claim that questioning plays a valuable role in the learning process.

A final significant result from the Chouinard, Harris and Maratsos (2007) studies relevant to the present discussion can be seen in the authors’ analysis of the number of questions asked by children under the question condition in the hidden box task. The data here suggests that it is not simply asking *more* questions but asking good questions that makes a difference to the children’s success. Thus, the

authors assert that “it does not seem like number of questions is key; asking the right question seems to be the key” (2007, p.89). This provides some preliminary support for the claim that *good* questioning plays a valuable role in learning.

This empirical evidence highlights the valuable role that questioning plays in the learning process. Given that inquisitiveness has been identified as the question-asking virtue, this provides support for the claim that we should educate for the virtue of inquisitiveness. In addition to this, however, we can also examine the role that inquisitiveness plays in intellectually virtuous inquiry more generally. Given that a central aim of educating for intellectual virtue is to nurture intellectually virtuous inquirers this will provide a broader theoretical basis in support of educating for the virtue of inquisitiveness.

4. Inquisitiveness and Intellectually Virtuous Inquiry

The project of educating for intellectual virtue extends naturally beyond the task of cultivating in the learner any one of the individual intellectual virtues. The aims of educational practice in this context are, broadly speaking, to develop and nurture the features of the learner that make for *good thinking*. This can be contrasted with the aim of passing on as much knowledge or information as possible. As Pritchard (2013) notes, “education is to be distinguished from the mere transmission of information to passive minds” (p.237). Similarly, educating for an intellectually virtuous character can be contrasted with educating for moral or civic character. In the latter case, the aims of educational practice are, very broadly, to develop and nurture the features of the learner that make them a good person or good member of society. As such, the project of educating for intellectual virtue represents a distinct educational approach which places particular emphasis on the value of intellectually virtuous inquiry.⁷

In the previous section we observed the valuable role that questioning, and so inquisitiveness, plays in the learning process. This provides support for the claim that we should educate for inquisitiveness.

⁷ While a sharp distinction between educating for moral and intellectual character is perhaps unwise and is the subject of some debate in the virtue-theoretic discourse, the latter is clearly differentiated from the former with respect to its focus on intellectual as opposed to moral traits. For more discussion of the distinction between educating for moral and intellectual character see Elgin, 2011 and Baehr, 2013.

In order to further support the claim that inquisitiveness is a primary intellectual virtue to educate for we can now examine the role that it plays in intellectually virtuous inquiry more generally. We have identified a common goal shared by all the intellectual virtues, namely, the goal of improving epistemic standing. However, different intellectual virtues aim at this common goal in distinct ways. In order to determine the role of inquisitiveness in intellectually virtuous inquiry then it will be useful to identify the distinctive manner in which it aims at this common goal. In doing so, we will further establish the significance of educating for inquisitiveness.

In *The Inquiring Mind* (2011), as noted earlier, Baehr offers a taxonomy of the intellectual virtues in which he divides the virtues into six groups. These groups are determined on the basis of the relationship between different virtues and the process of inquiry (p.21). Accordingly the intellectual virtues are classified in terms of whether they are concerned with motivating inquiry, focusing inquiry, keeping inquiry consistent, inquiring with integrity, inquiring in a flexible manner or enduring in inquiry. Within the present framework, each of these can be understood as a distinct way of improving epistemic standing. Baehr (2011) notes in particular that “one...demand [of successful inquiry] is fundamentally *motivational*, for inquiry must be initiated or undertaken” (p.19). The virtue of inquisitiveness, as we have seen, is thereby listed under the heading of ‘Initial motivation’. Along similar lines, in his discussion of inquisitiveness Miscevic (2007) contends that inquisitiveness is a “*clearly motivating* epistemic virtue” (p.264, emphasis added). As such, Miscevic and Baehr both draw attention to the key role that inquisitiveness plays in the initiation of inquiry. This classification of inquisitiveness as a motivating intellectual virtue, moreover, seems intuitively right. Comparing it to other intellectual virtues, such as those addressed in the present volume, including open-mindedness, intellectual courage, intellectual humility and rigor, it seems reasonable to posit that inquisitiveness sets itself apart from these on the basis that it is distinctively concerned with ‘getting inquiry off the ground’. Inquisitiveness is thus a motivating intellectual virtue. This sets it apart from many of the other intellectual virtues and as such determines in an important sense its distinctive role in intellectually virtuous inquiry.

As Baehr observes, moreover, “inquiry *must* be initiated” (2011, p.19, emphasis added). It must be put into motion or stimulated in some respect. Significantly, inquisitiveness plays precisely this key role as a motivating intellectual virtue; it *initiates* inquiry. Crucially, in addition its defining relationship to questioning distinguishes inquisitiveness from the other intellectual virtues as significant in this

respect. It is the role that inquisitiveness plays as the question-asking virtue that sets it apart from the other intellectual virtues and determines its distinctive role in intellectually virtuous inquiry. This distinctive role moreover, highlights the special features of inquisitiveness that make it a primary intellectual virtue to educate for in order to nurture intellectually virtuous inquiry. To further elucidate the distinctive role of inquisitiveness in this regard however, we can examine two concerns targeting the notion that inquisitiveness initiates inquiry. The first of these raises the question of whether *all* inquiry is initiated by inquisitiveness. The second questions whether inquisitiveness *always* leads to inquiry. By addressing these concerns we will be able to both clarify and further refine the role that inquisitiveness plays in intellectually virtuous inquiry and thus provide further support for the claim that inquisitiveness is a primary intellectual virtue to educate for.

4.1 First concern: Not all inquiry is initiated by inquisitiveness

Inquisitiveness has been identified as distinctive among the virtues due to its role in getting inquiry started. However, one might reasonably object that not all inquiry is initiated by inquisitiveness. Take the following case by way of illustration. Imagine once again a school science pupil, this time faced with the task of writing a short paper on a scientific question of their choosing. This pupil, however, suffers from an acute lack of imagination and as a result is unable to come up with a scientific question to write his paper on. Approaching his teacher with this dilemma, the teacher suggests that he write a paper on why the planetary orbits are elliptical. With this suggestion in hand, the unimaginative pupil then diligently goes to work and comes back with an accurate, rigorously researched and well-articulated paper on the elliptical nature of the planetary orbits. Given the characterisation of inquisitiveness that we have established, the pupil in this case cannot be said to exhibit virtuous inquisitiveness; he did not actually ask the question he wrote the paper on. Nevertheless, he has undeniably engaged in a process of inquiry and, moreover, exhibited several of the intellectual virtues as demonstrated by the excellent paper. This case illustrates the concern that not all inquiry begins with inquisitiveness and so requires us to offer a more precise account of the role that inquisitiveness plays in the initiation of inquiry.

Indeed, the claim that inquisitiveness initiates all inquiry is too strong. In addition to the case described above, we can observe a number of familiar contexts that involve inquiry which do not result from an initial inquisitive drive. Inquiry by a doctor into a medical condition or by the jury in a legal proceeding

for example. As such, we must offer a more refined conception of the role that inquisitiveness plays in initiating inquiry. The crucial point to note here is that it does not follow from our claim that inquisitiveness initiates inquiry that inquisitiveness is *necessary* for inquiry. It is, as we have observed, simply not the case that inquiry must arise from inquisitiveness. Nevertheless, the claim that the virtue of inquisitiveness *does* (at least sometimes) initiate inquiry remains uncontentious. Moreover, the claim that inquisitiveness (at least sometimes) prompts intellectually virtuous inquiry is also very plausible. A characteristic motivation to engage sincerely in good questioning is bound to lead in some instances to intellectually virtuous inquiry. One may argue in fact, that it will *often* do so. It is this that emerges as significant when discussing the role that inquisitiveness plays in intellectually virtuous inquiry. Inquisitiveness often initiates intellectually virtuous inquiry and is importantly distinguished by this fact. This provides a response to our first concern. In relation to the project of educating for intellectual virtue, the significance of this can now be underlined by turning to the second concern.

4.2 Second concern: Inquisitiveness does not always lead to inquiry

In support of the claim that inquisitiveness often initiates intellectually virtuous inquiry we can imagine a wide variety of cases from everyday life. Take the child who embarks on a thorough examination of butterfly species after questioning how they come to have such a variety of patterns and colours. Similarly, take the amateur historian who conducts an open-minded investigation into the rise and fall of the Roman Empire after questioning how it was able to dominate such a significant portion of Europe and the Middle East. Finally, take the brilliant scientist who performs a series of novel experiments on the nature of gravity after questioning why apples fall from trees in the direction of the earth. These examples demonstrate the broad spectrum of inquiries that can and do result from virtuous inquisitiveness.

Alongside these cases, however, we can also easily imagine a wide range of everyday cases in which inquisitiveness is thwarted from the outset. The fascinated child is told not to play with insects. The amateur historian is diverted by a family commitment. The brilliant scientist is forced to abandon scientific experimentation after being labelled a heretic. In all of these cases, intellectually virtuous inquiry does not ensue despite virtuous inquisitiveness on the part of the inquirer. Hence our second concern; inquisitiveness does not *always* lead to inquiry.

All of these cases, however, share something in common and this common link in fact serves to highlight the unique and defining relationship that inquisitiveness bears to the initiation of inquiry. Specifically, in each of the cases, our inquisitive inquirer is thwarted by something *extrinsic* to the conditions of their inquisitiveness. The child, for example, must inquire in line with the priorities of the adult who sees the butterflies in a very different light. The amateur historian is diverted by his own priorities which place his inquiry below that of his commitments to family. Isaac Newton, as we know, was at the mercy of the prevailing wisdom of his time. It is these extrinsic factors that prevent inquiry from taking place. In the absence of such extrinsic factors however, it seems plausible that any inquiry brought about by an initial inquisitive drive will *necessarily* take place. Uninhibited inquisitiveness will *always* lead to inquiry. This is due to the unique relationship that the virtue of inquisitiveness bears to the initiation of inquiry in its role as the question-asking virtue. In order to be virtuously inquisitive a person *must* ask questions. Inquiry is initiated through questioning. As the question-asking virtue inquisitiveness thereby bears a unique relationship to the initiation of inquiry. It is, one might say, in the nature of inquisitiveness that it initiates inquiry.

Before proceeding along these lines, it is worth considering one final challenge to this claim in order to draw attention to an additional and significant point of interest. Return, then, one last time to our school science class. This time, imagine a pupil with all the characteristic features of inquisitiveness; a pupil characteristically motivated to engage sincerely in good questioning. However, despite her inquisitiveness, this pupil lacks most, perhaps all of the other intellectual virtues. As such, while she often asks good questions motivated by a genuine desire to know or understand the answers, she nonetheless fails to embark on intellectually virtuous inquiry. As with our previous inquirers, this is not because she lacks the virtue of inquisitiveness but because she simply cannot proceed from the starting line due to her own intellectual capacities. In this case, one may object, it is at least less obvious that our inquisitive inquirer is thwarted by *extrinsic* factors. The pupil is prevented from inquiring virtuously due to her intrinsic capacities. As such this appears to be a case in which virtuous inquisitiveness fails to lead to intellectually virtuous inquiry despite a lack of external barriers.⁸

Interestingly, this final case, I believe, takes us some way beyond the original concern and highlights a question central to the project of educating for intellectual virtue itself; a question concerning the

⁸ Thanks to Jason Baehr for raising this concern.

unity of the intellectual virtues. We may ask, for example, to what extent the virtues can be isolated from one another in the manner suggested in the example. Can our pupil really be virtuously inquisitive yet lack most or all of the other intellectual virtues. If so, then we may ask how many of the intellectual virtues or what degree of intellectual virtue in general is required in order for an agent to be engaging in intellectually virtuous inquiry. These are questions that extend beyond the scope of the present discussion. They are, however, nonetheless salient in relation to the project of educating for intellectual virtue. In addition, the case above allows us to raise a further significant question which draws on the previous discussion as a whole. This concerns the role of questioning itself in intellectually virtuous inquiry. As has been noted, many, if not all of the intellectual virtues are at least sometimes manifested in the activity of questioning. While the other virtues are not defined by this activity in the manner that we have identified for inquisitiveness, questioning, and in particular good questioning, nevertheless features prominently in intellectually virtuous inquiry. Open-minded questions, rigorous questions, intellectually courageous questions and so on. Questioning can thus be seen to underlie intellectually virtuous inquiry. As such, it may also provide the basis for at least a weak conception of unity among the intellectual virtues. In order to be intellectually virtuous in any respect, one must be able to engage in good questioning. This ability to some extent unifies the intellectual virtues.

If this is so, moreover, then we also have a response to the case presented above in relation to the original concern. The case itself, in fact, appears less feasible. Specifically, the pupil's ability to engage in good questioning, in virtue of her inquisitiveness, ensures that she *will*, in fact, engage in intellectually virtuous inquiry, at least to some minimal degree, so long as she is not prevented by extrinsic factors. If she fails to engage in good questioning then she will also fail to engage in intellectually virtuous inquiry but so too will she fail to exhibit the virtue of inquisitiveness. The ability to engage in good questioning thus ties inquisitiveness to the other intellectual virtues and to intellectually virtuous inquiry in general. This demonstrates, I believe, the significance of questioning within the intellectual virtue-theoretic framework broadly speaking. In doing so, it likewise indicates the centrality of questioning in relation to the project of educating for intellectual virtue.

This final suggestion serves to further emphasise the special significance of inquisitiveness in relation to educating for intellectual virtue. The practice of questioning plays a central role in intellectually virtuous inquiry. The unique relationship between inquisitiveness and questioning that has been highlighted throughout the discussion is thereby also central to the aim of nurturing such inquiry. No

others of the intellectual virtues are *defined* by their relationship to questioning and so neither do they exhibit this distinctive relationship to inquiry. Inquisitiveness not only often leads to intellectually virtuous inquiry but is defined by its role in the initiation of such inquiry. Thus we have identified the distinctive role that inquisitiveness plays in the intellectually virtuous life. Without the virtue of inquisitiveness, inquiry itself would be a vastly more limited and one might imagine intellectually poorer pursuit. A characteristic motivation to engage sincerely in good questioning is therefore integral to the fulfilment of an intellectually virtuous life. Insofar as the nurturing of intellectually virtuous inquiry is a central aim of the project of educating for intellectual virtue, this places inquisitiveness centre-stage. Inquisitiveness is a primary intellectual virtue to educate for.

Conclusion

The inquisitive person has been identified as one who is characteristically motivated to engage sincerely in good questioning. As such, a unique relationship between inquisitiveness and questioning has been established. On the basis of this relationship, inquisitiveness can be seen to play a valuable role in children's learning and, moreover, a central and distinctive role in the intellectually virtuous life. It is thus concluded that inquisitiveness is a primary intellectual virtue to educate for.

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