

Marie J. Myers

New Challenges: Developing Explicit Pedagogies of Noticing

Abstract

This paper is about an instructor in a university teacher program aiming at improving the students' ability for noticing in order to guide subsequent decision-making and actions in teaching. Whereas added awareness may come naturally to some people, others need to develop a habit and a way to identify important aspects. University students tend to surf the net at high speeds for a quick overlook of contents. While this is a great ability, they often do not stop long enough to identify what needs to be retained. For teaching purposes, it is crucial to learn to anticipate, develop the appropriate noticing strategies and to act, as this is a professional requirement.

After discussing contextual aspects, we describe the actual problematic and follow with the relevant theoretical underpinnings. Within these, we look at strategizing, developing awareness, and the capacity to act. The method used is qualitative and involves the analysis of the instructor's teaching journal notes. Findings point to the need for variety in activities, looking at pace and affinity in communities of practice as well as storage into memory leading to subsequent action.

Keywords: noticing in teaching, mastery of content, professionalization

Introduction

Teaching practice includes an awareness of differences which has developed in training programs so as to identify remedial actions.

Moreover in on-line teaching, an instructor, whose main role initially was to see to the assimilation of course contents, as for instance, in the course observed in this study to train students to become French as a second language teachers, is required to take on much more complex responsibilities.

There is a need to be fully engaged when preparing to teach. Thus the importance of the capacity for noticing.

The courses in this study followed the flipped classroom approach to enable the rehearsal of knowledge through follow-up in-class activities, based on prior preparation of learning documents. Responsibility for understanding the concepts rested mostly with the students while preparing for class, while the in-class activities aimed at consolidation to help processing the contents and promote their assimilation and to increase noticing.

Methodology

The method used is qualitative for uncovering details of particular teaching-learning moments as entered in the instructor's journal and later subjected to text analysis. The text consisted of instructor's teaching notes as well as class

observation notes as in the regular process to gather information to improve upon one's teaching. This was new in the context of on-line teaching, with only video conferencing with the students in classes. For this paper we concentrated on the notes dealing with noticing.

The site was a university setting with students in their fifth and sixth year and enrolled in teacher preparation courses. The notes were taken while teaching on-line which took place from April to December, 2020 and across six classes at different times.

I carried out observations, taking notes of a task they set, a pattern of speech they employed, a gesture they used, a question they asked and any other such items, which could help improve noticing and learning as advocated in research (Mason, 2002, p. 30).

The students were asked to note important items during their assigned readings. The different contributions from home assignments were discussed in groups at the beginning of the class which in turn led to establishing an order of priority for things noticed to be reported to the whole group. During each class, new ideas were contributed for students to understand the concepts to be mastered in different contexts.

During class time, activities were completed based on the prior preparations carried out.

Theoretical underpinnings

Strategize and anticipate

Noticing entails concentrating on something. Researchers in visual cognition (Brophy, 1998; Currie, 1995; Amabile, 1996) state that concentration increases when both creativity and necessity are present, therefore to create applications accordingly makes sense. These two modes of mental functioning are independent and used in survival contexts with people being more alert, so they were activated to improve outcomes. Simulations around such situations worked as a teacher would need to identify critical moments.

With many pupils in classrooms an ability for multitasking would be desirable, so reducing time required for tasks is a must. This would entail developing noticing activity to the point of making it 'automatic', in line with Leontiev's (1978) notion of habit development. According to research, we can proceed, either, through continuous realignment, and imitation, or by reducing the number of conscious techniques or processes we usually carry out. It is a matter of adapting to new ways and adopting a number of useful strategies. So practicing over time is a must.

For instance, in the medical field there are different kinds of observing activities for various purposes. Patients are observed and changes noticed require actions (Tanner, 2006; Watson & Rebar, 2014). As well experienced teachers observe their students and if necessary they appropriately intervene (Barnhart & van Es, 2015; Stürmer & Seidel, 2015).

Awareness and mindfulness

Mindfulness in communities of practice is more effective as people in groups go from looking at their single ways of doing to an awareness of forming patterns and

observe deviations in groups. Moreover, because of events that materialize in ways that were not necessarily as anticipated, dealing with oddness increases noticing and learning through better storage into memory.

As language is involved, Bygate (1987) sees two categories in the actual uttering of learned contents, with concentration on understanding plus an unfolding into action. He suggests that first one takes on understanding of how to carry out the strategies, then, one has to actually use the capacities in effective production, which would correspond to the completion of tasks and activities in class.

This boils down to also equipping students with tools to guide what they are expected to notice. Such tools need to take into account not only the different foci for noticing but place these in a wider frame of reflective practice that will lead to the development of professional vision and framing.

Capacity to act

Learners need not only notice what is needed of them, they need to utilize important information and direct their own learning activities in the direction required by a clear understanding of the circumstances in which they find themselves and where they wish to end up. Self-direction and self-regulation are initiated by noticing or are preceded by it. This is also what Boud and Walker (1990) describe as noticing in their discussion of reflection in learning from complex educational experiences. It involves a cycle of noticing, intervening, reflection on the outcome, leading to further noticing, intervention and reflection. This corresponds to Schön's (1983) notion of learning from reflective practice and comes from the tradition of experiential learning. Noticing can thus be seen as a component of reflection. However, the reflection literature tells us little about the noticing or observing phases of learning cycles. For learning to be assured, however, students must approach a situation with an intent to learn which is a powerful shaping influence on what they attend to (Boud & Walker, 1990). In addition to keeping students engaged, special characteristics for observations and simulations have to be developed to increase noticing. An efficient and effective way to carry this out is through team-work with back and forth questioning and reflections.

This emphasis on activity is crucial. The development of neural connectivity is activity dependent. This means that a lot of practice helps.

Findings

From the analysis of instructor's journal notes on aspects addressed above, we uncovered a number of issues and desirable strategies to be implemented in order to develop further actions for noticing.

Student engagement

Across the different groups, various activities were designed around simulations, some requiring creativity (i.e. group members imagining living together as a family) while others were built around necessity (i.e. create a financial literacy lesson around a limited budget) in order to increase noticing. Outcomes were generally excellent, however there were a variety of activity levels noticed. In group

work the students all came together, nevertheless they displayed very diversified capacities which made the workload uneven.

The distribution of activity in groups seemed uneven as some students carried out most of the responsibility for the tasks, which presupposed an already high degree of noticing. Others seemed less aware. The intent had been to give students the preparation time they required ahead of class so they should have been equally ready.

There always seemed to be leaders who led the discussion on how to go about the task. Group members participated in the discussion suggesting different strategies and it was obvious that they projected steps and possible outcomes in their minds, delineating pathways for task completion although they intervened in different ways.

Pace

Advanced students could carry out the work very quickly. Noticing in professional contexts has to be followed with quick action but it also requires the ability for a weighting scheme in noticing, i.e. being able to sort out what is important. The problem with follow-up assignments in class was confronted to the differences in students' paces. During class task completions some students were also consulting the assigned texts rather than their notes on them, which slowed them down. The question is whether or not they had done their homework. Another issue could be related to their inability yet to separate important aspects from trivial ones. Therefore, unevenness in background preparation and yet unsatisfactory levels of pedagogical awareness showing in some students, pointed to them requiring more time. A factor that came into play was attention to detail.

Those students who took more time often also took into account more aspects. Moving fast was not necessarily positive.

The importance of affinity

Initially students were told that they could switch groups. No-one moved to another group although some group members worked at different paces, however they always completed the tasks remarkably well. Clearly the students' groups came together as communities of practice in their noticing tasks.

Only one student asked if she could work on her final assignment, a backward design project, with her friends, from another group. When questioned whether it had to do with cooperation, the student said no, rather she felt that as she had known the others from previous university years, they would carry out the tasks more efficiently. The issue was concern over the grade to be obtained.

Storage into memory

Motivation varied among students and some also had not retained all the key processes that they had worked through. The question raised was whether they carried out their work seriously. This also has to do with selectivity. With prior preparation of texts and subsequent in-class actions to reinforce learning, the concepts presented should have become internalized. Some students felt they had gained the knowledge in a general way; however when questioned they could not provide specific answers.

Discussion

Willingness

Billett (2016) argues there must be some intent to learn from observing practice. For professional judgement you need capable noticing and this entails the ability to notice salient features in teaching.

Often noticing itself is generally an implied feature in observation and is treated as non-problematic. However visual cognition specialists suggest strategies for noticing including a willingness to concentrate and to understand the new information, in line with Boud and Walker's (1990) suggestions.

It would be a good idea to set up a discussion board for each group for each different task or activity to be completed, but not use the one set-up for the whole class. This would allow group members to interact in order to come up with their notes on the prepared materials, yet not give them the capacity to use other groups' work to adapt and hand it in as their own. It would make them more responsible.

High levels of activity for task completion allows to focus attention more. Hence the need to also concentrate on a visual object, using graphs, videos etc., add physical activity with movement, coaching style activities, resort to creative approaches, also including different sound tracks and music, with in addition miming or acting in role playing, or all in combinations, for superior outcomes. There may be more engagement if participants were also assigned to produce their own individual product. This way there would be further practice and the instructor could see further deviations and provide individual feedback.

Pace

It is necessary to remind all the students of the learning gains through distributed participation in noticing, in order to carry out tasks more efficiently. Perhaps a solution could be an approach to learning with student groups only coming to meetings with the instructor when they feel they had grasped the material. That would give everyone the time needed. It could also require having students take a quiz within given timelines to keep the program in line with expectations and outcomes so as to establish whether or not students are on the right track.

Affinity

The social interaction in affinity groups getting together was definitely a positive aspect. Although the "success for all" approach in evaluation was explained, some students were still stuck to a traditional evaluation method and very competitive. They expressed their complaints about feeling that they deserved to be recognized individually for superior work. The idea was to get them to understand the cooperation and collaboration involved for the success of all. Overall group pace needs to be monitored more closely over time and perhaps advice be given on how to address various ways of being and doing i.e. acknowledging diversity, being inclusive, and equitable although students are supposed to have this training.

Internalization

There is clearly a need to present strategies for effective group work to the students, like for instance, assigning them changing roles from one session to the

next. Perhaps requiring them to have a responsible team captain to collate every group members' contributions weekly, might ensure that they get a head start and do not just prepare at the last minute and ensure working on materials for better retention, with the in-class activity serving as reinforcement. The importance of their involvement in the activities has to be stressed as regards its importance in the assimilation of the concepts that were under scrutiny.

Conclusion

To sum up, this was a study on increasing noticing in a teacher preparation program. The intent to use the flipped-classroom approach was to direct students in their class preparation materials to noticing more of the contents to be covered initially. Plus during the follow-up classroom activities, for some lessons the emphasis was to create more concentration on noticing. Overall students developed more awareness, although for some a certain degree of awareness already had been present which points to individual difference.

This took place in the context of on-line teaching which made continuous observation impossible, nevertheless regularly joining breakout rooms enabled the instructor to glean a lot of detailed information.

Although group work was key in supporting all students, it appears that in some cases students would need to be required to carry out a follow-up activity entirely on their own, if one were to have to judge the level of their efficacy in noticing.

As these students also had school practicum placements, the added experience would have helped them further develop their capacities for noticing. There definitely should be closer coordination between course work and school placement to provide more support and better articulation.

As regards in-class training there are a number of aspects to take into consideration.

Recommendations

Increase interest and engagement

More variety could be proposed in tasks to be completed to keep everyone engaged in noticing, perhaps along the lines as the concepts used in programmed learning.

Different activity levels should be created, perhaps with a sliding scale of grades to be assigned. As well, students could be more involved in instructing some others in their groups, to support the instructor's effort in identifying and catering to their needs, in turn, this also increases noticing.

Monitor pace

Due to some inability to separate important from trivial aspects, additional training should be provided.

Role switching among group members would increase awareness of reflectivity in contributing. A better articulation between class-work on noticing and field work would be more efficient.

Community

Placing the focus on the activity to be completed and giving groups different activities to choose from, might direct students to different peers based on their interests which may also get the groups to complete the activities faster with distributed knowledge.

Action

To increase mastery of the items under scrutiny, it may be necessary to have short exams or quizzes to reinforce the importance of what is to be learnt and with additional review increase memory storage.

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Prof. Dr. Marie J. Myers, Queen's University, Canada