

Method of Forming General Skills in Students

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Abstract: There are various methods through which educational institutions can help foster and develop general skills in students. General skills refer to transferable abilities that are not specific to a single subject area but are applicable across multiple disciplines and useful for students' future careers and lives. Some of the key methods that schools and teachers can employ to effectively form general skills in their students are discussed below.

Keywords: innovative methods, education methods, well-qualified teachers, learning environment.

Introduction: It is known that any science, particularly chemistry, has fundamental ideas, regulations, strategies and hypothesis, which are executed during the time spent learning science. Any action is a bunch of explicit activities and their consecutive execution. The mental (dynamic) move toward in the instructive cycles of instructive foundations assumes a functioning part in understudies' dominance of science and fills in as the reason for the development of their mental capabilities. The mental hypothesis of movement is viewed as the fundamental strategy for showing any subject. Problem tackling in science is the logical technique. Science process abilities (SPS) are significant components in the logical strategy.

As per Ozgelen, SPS is a reasoning expertise utilized by researchers to construct information to take care of issues and form results. In view of these suggestions, SPS is a significant component for critical thinking abilities (PSS). SPS is a mediator thinking expertise for PSS. PSS is one of the 21st century thinking abilities requests. PSS by Quavering and Fadel is incorporated as the master thinking about a gathering with decisive reasoning abilities. Taking into account that SPS is a significant component of PSS, when PSS is expressed as a 21st Century request expertise, SPS should be intrinsic.

That is, SPS likewise incorporates thinking abilities requests of the 21st hundred years. For alumni of instructive foundations to have sufficient SPS, endeavors ought to be made to foster SPS through organized and enormous learning. So, the science instruction graduates delivered by the FMIPA Unesa Science Schooling Review Program have satisfactory SPS, creating SPS is important. Unhitched male of Science Training moves on from the Staff of Arithmetic and Inherent Sciences are unquestionably ready to become 2013 educational program members when they go to class.

It has frequently been expressed that the points of a down to earth course ought to be to support understudies' hypothetical learning, by giving true instances of the hypothesis they have considered. This methodology of connecting hypothesis and practice, be that as it may, seems to little affect fostering's comprehension understudies might interpret ideas in science. As a matter of fact, the critical mental burden request put on understudies in a new research center setting decreases the capacity of understudies to ponder the hypothesis supporting the job needing to be done. An undergrad reasonable science program ought to consequently lay out an underpinning of useful abilities, as opposed to fitting lab tests around hypothesis learnt in addresses.

There are various hindrances to understudy learning in the research center. Understudies can find it trying to apply information acquired in one part of science, to circumstances in another branch. This is especially perceptible when lab work is shown along customary limits of inorganic, natural, physical and insightful science. We have ourselves noticed these difficulties in the lab; understudies can battle to justify natural response pathways utilizing thermodynamic ideas. The issues can likewise appear in pragmatic methods. We have noticed understudies directing inorganic practical endeavoring to eliminate combustible solvents on hotplates, representing that understudies had compartmentalized the utilization of rotating evaporators as a natural strategy.

While planning science research facility practical to fit inside the conventional discipline limits, understudies might botch the chance to make associations between various areas of science. The methodology likewise ineffectively plans understudies for professions in research, where limits between subject disciplines are all the more approximately characterized and it is progressively normal to work across various disciplines.

Reconsidering how science practical are planned, with a focal point of getting ready understudies for research, permits us to create some distance from customary 'cookbook' style practical. By bringing parts of exploratory plan into the undergrad viable course, understudies can foster the critical thinking abilities expected of a researcher. Presentation of test plan into science down to earth programs is turning out to be progressively typical. We have additionally revealed such work as of late, especially focused on the beginning phase of an undergrad pragmatic course

Research Methodology.

We had the valuable chance to overhaul our reasonable science course, to correspond with the culmination of another showing lab office in 2023. The course upgrade offered us the chance to reconsider how we show our undergrad science understudies viable science. We had the option to reevaluate the abilities and characteristics we accepted a science graduate ought to have, and adjust our instructing likewise.

An unmistakable arrangement of targets for the new course was laid out and spread out in the course Statement of purpose:

The all-encompassing point of the undergrad reasonable course is to motivate a mindfulness, appreciation and happiness regarding down to earth science. We mean to accomplish this by zeroing in on various more unambiguous, substantial points:

To advance safe research center working practices;

To create functional and critical thinking abilities;

To give a trial establishment to hypothetical ideas and peculiarities;

To acquaint understudies with logical practices as utilized by established researchers;

To advance parts of logical reasoning;

To further develop relational abilities, including capability at logical composition.

Discussion.

The abilities were arranged into 12 separate classes. Inside every one of the different classes, abilities were assigned a level, in light of assumptions for understudies' related knowledge, hypothetical grasping required, specialized trouble and wellbeing contemplations. These levels were characterized:

Fundamental abilities: fundamental abilities required from year one of the down to earth course;

Middle of the road abilities: abilities that were all the more hypothetically as well as actually further developed than those in the Essential classification;

Progressed/Discretionary: seriously requesting or concentrated abilities that based upon and expanded those canvassed in the middle classification, pointed towards research level application.

Abilities inside the 'High level/Discretionary' class require fundamentally more noteworthy specialized and hypothetical contemplations. They might utilize specific particular instrumentation or include more intricate functional contemplations. These 'High level/Discretionary' abilities furnish understudies with potential chances to investigate specific areas of premium, preceding finishing of examination in the last year research project. Showing these abilities are open doors for foundations to exhibit their own skill and specialties.

It ought to be underscored that the Abilities Stock was incorporated for of distinguishing abilities that could be utilized to shape a course, however not as a prescriptive rundown to be covered by the course. To be sure, we have ourselves refined this rundown to accommodate our offices and the ability inside our foundation. The rundown covers just the lab and research center related abilities. Lab work additionally cultivates various adaptable abilities, for example, correspondence (for example oral, logical composition), group working, association and using time productively. Inclusion of these adaptable abilities ought to be woven into the design of the entire degree.

Analysis and Results.

With our laid-out abilities stock, we next tended to how showing these abilities could be accomplished. Our methodology was to foster a functional program that perceives understudies' related knowledge and afterward logically expands upon this. Our point is to give both broadness of openness to a scope of exploratory strategies and adequate rehashed insight of these abilities to work with information maintenance. Our methodology develops such dispatches, taking into account the advancement of abilities across the full undergrad science commonsense program.

Vitality, we set off on a mission to confer comprehension of why specific strategies/abilities were decided to play out specific errands, close by how those methods are performed. By putting an accentuation on both the "how" and "why", understudies ideally gain a more prominent enthusiasm for the pragmatic work they are directing. This clarification driven approach has been widely shown to be more powerful than reality driven techniques. Our vision is to make a course where understudies are formed into issue solvers, not recipe devotees.

A vital part of fostering our new course was thinking about the best means to mirror the really integrative nature of science, not as a science isolated into storehouses. To satisfy our hold back nothing improvement program, we set out a plan as a progression of explicitly evolved practical, as opposed to isolating the useful course by subdiscipline. The plan considers science to be introduced as an associated science and along these lines, there are open doors for enhancement of the understudy insight through multidisciplinary instructing. Comparative methodologies have been featured by Tough et al.; in their new distribution they talk about the upsides of multidisciplinary showing in working on emotional and mental learning and decisive reasoning. We expect to foster a framework thinking approach in our understudies, permitting them to ponder science all the more profoundly and in a less compartmentalized way.

It was critical to perceive that every individual pragmatic meeting doesn't have to convey a diverse encounter of science; certain abilities are adequately perplexing and essential to one part of science that they require individual concentration. Whenever the situation allows, we feature ongoing ideas for abilities and procedures which are important across sub-disciplines. We have been mindful so as to plan practical so we don't acquaint different new abilities with understudies in one useful meeting, determined to wipe out mental over-burden.

A significant test for any functional course is guaranteeing abilities maintenance. Understudies should have the option to review and execute down to earth assignments they have had past involvement with performing. In such manner, both certainty and ability are significant contemplations.

We decided to take on a recurrent openness technique as a way to set key reasonable abilities mastered by our understudies. We have planned to find some kind of harmony between reiteration to foster certainty, and the potential for redundancy to prompt decreased understudy commitment. As indicated by Campitelli and Gobet:

"Repetition redundancy - just rehashing an undertaking — will not without help from anyone else further develop execution."

"Intentional practice comprises of exercises deliberately intended to further develop execution."

It was hence vital that we fostered a course where there are adequate contrasts each time an expertise is returned to. To accomplish this, we applied the utilization of a winding educational program. The characterizing elements of this instructive methodology are framed underneath:

Support - energizes maintenance of information;

Easy to complex - points can be acquainted in a way with develop intricacy, to empower better comprehension;

Combination - empowers network with various parts of the course to be connected promptly;

Legitimate grouping - a consistent string to lead through the different points can be made at the educational plan configuration stage;

More significant level targets - the model urges understudies to move past information review, to use of information and abilities.

The utilization of twisting educational programs has a few priorities in optional training and tertiary synthetic schooling, especially natural science, however is still somewhat neglected in advanced education science instructing.

Conclusion

In conclusion, forming general skills in students requires a multifaceted approach from schools that goes beyond a focus solely on academic subjects. The methods discussed, including emphasizing key skills like communication, problem-solving and self-management through coursework, providing experiential learning opportunities, and facilitating extracurricular involvement, can help students become well-rounded, competent individuals well-equipped for future challenges. Concerted efforts are needed from educational institutions to systematically develop general skills alongside disciplinary knowledge in order to prepare students for lifelong success.

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